

Notice of Allowability

Application No.

10/726,694

Examiner

Chih-Cheng Glen Kao

Applicant(s)

FRANCKE ET AL.

Art Unit

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/23/06.
2. ☒ The allowed claim(s) is/are 1,3-16 and 21.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 3/7/06
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Scott Elchert on 4/11/06.

2. The application has been amended as follows:

In claim 1, line 36; replace "whereby" with - -wherein- -.

In claim 3, line 3, in the phrase "said axis"; replace "said" with - -an- -.

In claim 4, line 3, in the phrase "said axis"; replace "said" with - -an- -.

In claim 8, line 2; insert - -arrangement- - after "radiation source".

In claim 8, line 3, in the phrase "said axis"; replace "said" with - -an- -.

In claim 9, line 2; insert - -arrangement- - after "radiation source".

In claim 9, line 3, in the phrase "said axis"; replace "said" with - -an- -.

In claim 10; line 37; replace "whereby" with - -wherein- -.

In claim 11, line 3, in the phrase "said axis"; replace "said" with - -an- -.

In claim 11, line 4, in the phrase "said stack"; replace "said" with - -the- -.

In claim 12, lines 2-3, in the phrase "the transmission"; delete "the".

In claim 15, line 2; insert - -arrangement- - after "radiation source".

In claim 15, line 6, in the phrase "object in"; replace "in" with - -at- -.

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In claim 16, line 40; replace "whereby" with - -wherein- -.

In claim 21, line 3, in the phrase "the different"; delete "the".

In claim 21, line 36; replace "whereby" with - -wherein- -.

Reasons for Allowance

3. Claims 1, 3-16, and 21 are allowed. The following is an examiner's statement of reasons for allowance.

4. Regarding claims 1 and 16, prior art fails to disclose or fairly suggest an apparatus and method including a radiation detector arrangement comprising a stack of line detector units, each line detector unit being directed towards a small portion of a trajectory of a radiation beam in an examination object to allow a respective ray bundle of said radiation beam as coherently scattered in said examination object to enter the line detector unit and be detected therein, wherein each of said line detector units has an elongated opening extending essentially orthogonal to said radiation beam for entry of the respective coherently scattered ray bundle, a row of individual detector elements arranged essentially parallel with said elongated opening for detecting different portions of said ray bundle scattered at different angles with respect to a plane whose normal is parallel with the extension of the elongated opening, and is of the kind wherein charges or photons, generated by interactions between the respective coherently scattered ray bundle and a detection medium within the respective line detector unit and traveling in a direction essentially perpendicular to the respective coherently scattered ray bundle, are detected by said row of individual detector elements, wherein said line detector units are direction

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sensitive and directed towards different adjacent positions along the trajectory of said radiation beam in said examination object so that ray bundles of said radiation beam as coherently scattered in different small portions of said examination object enter different ones of said line detector units and are detected therein, in combination with all the limitations in the claim.

Claims 3-9 are allowed by virtue of their dependency.

5. Regarding claims 10 and 21, prior art fails to disclose or fairly suggest an apparatus and method including a radiation detector arrangement comprising line detector units arranged in a stack extending in a second direction substantially orthogonal to a first direction and to a radiation beam, all of said line detector units being direction sensitive and directed towards a single small portion of a trajectory of said radiation beam in an examination object to allow ray bundles of said radiation beam as coherently scattered in said examination object at different angles with respect to a plane whose normal is essentially parallel with said second direction to enter different ones of said line detector units and be detected therein, wherein each of said line detector units has an elongated opening extending essentially parallel with said first direction for entry of the respective coherently scattered ray bundle, a row of individual detector elements arranged essentially parallel with said elongated opening, and is of the kind wherein charges or photons, generated by interactions between the respective coherently scattered ray bundle and a detection medium within the respective line detector unit and traveling in a direction essentially perpendicular to the respective coherently scattered ray bundle, are detected by said row of individual detector elements, wherein said line detectors units are directed towards the same

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small portion of the trajectory of said radiation beam in said examination object, in combination with all the limitations in the claim. Claims 11-15 are allowed by virtue of their dependency.

Conclusion

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Cheng Glen Kao whose telephone number is (571) 272-2492. The examiner can normally be reached on M - F (9 am to 5 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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